

CLAIMS

1. A percolating steeper, comprises a carafe, a cover body, a filter layer, an isolating layer and a control element; the circumferential rim of the said isolating layer is disposed with a tight unit to contact the carafe; at least one free moving non-return unit and one passive non-return unit are disposed on the isolating layer; the said control element indirectly controls the downward or upward movement of the isolating layer and the filter layer by means of the passive non-return unit; both the free-moving non-return unit and the passive non-return unit comprise a cover body with holes; a valve body is situated at the valve door on the isolating layer; the valve door penetrates through the isolating layer by means of a valve hole; the tight unit of the isolating layer and the tight point of the carafe are higher than the lowest feed water surface in the lower aspect of the isolating layer used for conducting the liquid into the valve hole; through this elevation difference, the visual effect of air isolation is obviously generated when the substance and the infusion is separated.
2. A percolating steeper according to Claim 1, wherein, a protruding body is disposed at the lower end of the isolating layer and the lower end of the protruding body is defined as the lowest feed water surface.

3. A percolating steeper according to Claim 1, wherein, ~~the~~ said valve hole penetrates through the protruding body.

4. A percolating steeper according to Claim 1, wherein, the design of the said protruding body is in a tube shape to be penetrated by the valve hole.

5. A percolating steeper according to Claim 1, wherein, the design of the said protruding body is concave to make the lower end opening of the valve hole situate on the bottom plane thereof.

6. A percolating steeper according to Claim 1, wherein, the shape of the said protruding body can also be a ring shape to situate the valve hole inside the ring-shaped protruding body to at least maintain a certain distance with the lowest feed water surface.

7. A percolating steeper according to Claim 1, wherein, ~~the~~ said filter layer and the isolating layer can be connected as one unit.

8. A percolating steeper according to Claim 1, wherein, ~~the~~ said filter layer and the isolating layer can be detachably combine with each other.

9. A percolating steeper, basically comprises a carafe, a cover body, a filter layer, an isolating layer and a control element; a protruding body is disposed below the said isolating layer and a tight unit is disposed on the circumferential rim of the said isolating layer to contact the carafe; at

least one free moving non-return unit and one passive non-return unit are disposed on the isolating layer; ~~the~~ said control element controls the downward or upward movement of the isolating layer and the filter layer by means of the passive non-return unit; both the free-moving non-return unit and the passive non-return unit comprise a cover body with holes; a valve body is situated at the valve door on the isolating layer; the valve door penetrates through the isolating layer by means of a valve hole for the fluid to flow in and out; the present invention is characterized that ~~the~~ said protruding body is in a ring shape, the lower end opening of the valve hole and the lower end area of the ring-shaped protruding body maintain a certain distance; the filter layer situates in the lower aspect of the ring-shaped protruding body.

10. A percolating stepper according to Claim 9, wherein, ~~the~~ said filter layer can be disposed at the lower end opening of the ring-shaped protruding body by means of a filter screen.

11. A percolating stepper according to Claim 9, wherein, the filter screen of the filter layer can be disposed inside a cover body; the cover body can be assembled with the protruding body to make the filter screen situate at the lower end opening of the ring-shaped protruding body.

12. A percolating stepper according to Claim 9, wherein, ~~the~~ said

